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A NEW SUBSPECIES OF CHIPMUNK FROM THE DOOR PENINSULA, WISCONSIN (MAMMALIA: RODENTIA)

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The assignment (Jackson, Mammals of Wisconsin, Univ. Wisconsin Press, p. 149, 1961) of pale chipmunks from the Door Peninsula, Wisconsin, to *Tamias striatus peninsulae* Hooper pointed to the question of how such a disjunct distribution could have resulted. Comparison of specimens from the Door Peninsula with specimens of *T. s. peninsulae* from lower Michigan revealed the presence of an unnamed subspecies, which may be named and described as follows.

Tamias striatus doorsiensis new subspecies

Holotype: Adult male, skin and skull (terminal nasal processes broken), No. 1633, Wisconsin State Univ. Mus. Nat. Hist., from Peninsula State Park, Door County, Wisconsin, obtained 28 September 1969, by John Small (orig. no. 15).

Description: Rump pale (tending to ochraceous, not to rust); pelage between dorsal stripes grayish agouti; median stripe dark and distinct; white postauricular patches large and conspicuous; cheeks ochraceous; tail elongate, frosted heavily with white intermixed with dark brown or black, having terminal hairs elongate and underside pale ochraceous; antiplantar surface of pes bright ochraceous; cranium robust and inflated having widened nasals, zygoma, rostrum, and processes of dentary; infraorbital canal large; incisors massive (see Measurements and Comparisons).

Comparisons: Compared with T. s. peninsulae, T. s. doorsiensis is as pallid, and two worn pelages taken in July are exceptionally pale. In doorsiensis the postauricular patches are much more prominent (especially in fresh pelage), the tail is longer, frosted more with white and more heavily intermixed with black, the dorsal pelage more grayish, the

24—Proc. Biol., Soc., Wash., Vol. 84, 1971 (201)

cheeks having less cinnamon and more ochraceous, the feet averaging less reddish, and the underside of the tail being a shade paler. Furthermore, the skull in *doorsiensis* is more robust and inflated, has wider nasals, rostrum, and zygoma, and the teeth are more massive. The lengths of the nasals and incisive foramina, and the external measurements are greater than observed in specimens of *peninsulae*.

Compared with *T. s. griseus* from central, eastern, and northern Wisconsin, *T. s. doorsiensis* hardly differs in cranial form, but the pelage is markedly paler overall, especially on the rump, the underside of the tail, the cheeks, and the feet. The tail is slightly more frosted with white, and the skull seems slightly more broad.

Measurements: Mean external measurements of the holotype and four lactating adults from Door County, Wisconsin, are as follows: Total length, 259 (251–265); length of tail, 95 (85–105); hind foot, 36 (36–37); ear from notch, 20 (19–23). Mean cranial measurements of five old adults and eight young adults from Door County are, respectively, as follows: Condylobasal length, 39.4 (39.1–39.8), 38.3 (37–39.2); zygomatic breadth, 23.5 (23.1–24.1), 22.6 (21.8–23.7); mastoid breadth, 17.0 (16.8–17.2), 16.6 (16.3–17.1); maxillary tooth-row, 6.6 (6.4–6.8), 6.6 (6.4–7.5); length of nasals, —, 13.9 (13.2–14.8) (five specimens).

Remarks: The eastern chipmunk on the Door Peninsula is well differentiated in numerous characters described above, but the skull resembles that of T. s. griseus. These two subspecies are closely related and interbreed freely on the base of the Peninsula, and to a lesser degree farther inland. The hypothesized intergradation (Hooper, Occas. Papers Mus. Zool., Univ. Michigan, No. 461, 1942) between griseus and peninsulae in upper Michigan may now be ascribed in large part to intergradation between griseus and doorsiensis.

A female from Peninsula State Park, taken on 11 July 1970, was lactating, contained four embryos (25 mm. c.r. length), and showed evidence of molt.

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Specimens examined: Total, 87 (77 in Wisconsin State Univ. Mus. Nat. Hist.). Tamias striatus doorsiensis: 3 mi. N Baileys Harbor, on Hwy 57, 1; Approx. 2 mi. N Jacksonport, at wayside, 2; Peninsula State Park, 16; Fish Creek, 1; Sturgeon Bay, 2; 6 mi. W. Sturgeon Bay, 5; 5 mi. SE Peninsula "center," 1. Tamias striatus peninsulae (Univ. Michigan): St. James, Charleroix Co., Beaver Island, lower Michigan, 10. Tamias striatus griseus: 8 mi. N Marinette, Marinette Co., 1; Within 1 mi. Manitowoc, 7; Pickerel Lake, Forest Co., 4; Hayward, Sawyer Co., 1; Drummond, Bayfield Co., 3; Crandon, 2; 1 mi. N. Tony, Rusk Co., 1; 1 mi. W Rhinelander, Oneida Co., 1; Amco Park, Rib River, Marathon Co., 1; Rib Hill, 1; Pittsville, Wood Co., 2; 3 mi. NW Arpin, Wood Co., 1; various localities in Portage Co., 24.